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A WALL MEMBER

Technical Field

The present invention relates to retaining walls.

Background of the Invention

5 Retaining walls are generally manufactured at the sight at which they are to remain. Frequently concrete is poured at the wall location, or the wall may be formed of building elements such as blocks or bricks again laid at the location of the wall.

The construction of the above mentioned walls is generally expensive and does not provide for services such as electricity and water.

Object of the Invention

10 It is the object of the present invention to overcome or substantially ameliorate at least one of the above disadvantages.

Summary of the Invention

15 There is disclosed herein a portable wall member for installation at a desired location, the wall member being formed of cast concrete and having a generally horizontal length and a generally vertical height which is less than said length, with the length extending between end faces, said member including:

 a base extending longitudinally between the end faces and to rest on a supporting surface at said location;

20 a wall portion extending between the end faces and upwardly from said base to said height; and

 at least one passage extending between said end faces to provide for services to extend through said member.

 Preferably said passage is provided in said base.

25 In a further preferred form, said passage is located in said wall portion.

 In a further preferred form there is a plurality of passages extending between said faces.

 In a further preferred form one of said passages is adapted to provide for the ducting of water, with said wall member having an outlet for water longitudinally
30 intermediate said faces.

In a further preferred form one of said passages is provided for the ducting of electric cabling, and said member has an upwardly extending passage for the provision of a light to be connected to said cabling.

Preferably said member has embedded in it a volume of material having a
5 density less than the density of said concrete.

Preferably said material is expanded plastics material.

Preferably said material is expanded polystyrene.

Preferably said wall portion is formed of cast concrete.

Preferably said base and wall member are integrally cast from concrete.

10 Preferably said wall portion is formed of cast concrete and is mounted on said base.

Preferably said wall portion is formed of sheet material having longitudinal extremities attached to said base so as to co-operate therewith to provide a longitudinally extending hollow.

15 Preferably said duct extends through said hollow.

Brief Description of the Drawings

A preferred form of the present invention will now be described by way of example with reference to the accompanying drawings wherein:

Figure 1 is a schematic perspective view of a wall member;

20 Figure 2 is a schematic front elevation of the wall member of Figure 1;

Figure 3 is a schematic end elevation of the wall member of Figure 1;

Figure 4 is a schematic perspective view of an alternative construction for the member of Figure 1;

25 Figure 5 is a schematic perspective view of a still further modification of the wall member of Figure 1;

Figure 6 is a schematic perspective view of a still further modification of the wall member of Figure 1;

Figure 7 is a schematic end elevation of a modification of the wall member of Figure 1;

30 Figure 8 is a schematic end elevation of a still further modification of the wall member of Figure 1; and

Figure 9 is a schematic perspective view of a still further modification of a wall member of Figure 1.

Detailed Description of the Preferred Embodiments

In the accompanying drawings there is schematically depicted a wall member 10 that may be used with similar constructed wall members to form a retaining wall or similar type structure. The wall member 10 at least partly is formed of cast concrete and is transported to the location at which it is to be installed. The wall member 10 is elongated and includes an elongated base 11 from which there upwardly extends a wall portion 12. The base 11 and wall portion have end faces 13 while the base has side walls 14. Extending between the end faces 13 is a bottom recess 15 while formed in the side walls 14 are recesses 16. The recesses 15 and 16 aid in reducing the overall weight of the wall member 10.

The wall member 10 have a generally horizontal length and a generally vertical height, with the length greater than the height.

The base 11 and/or wall portion 12 is/are provided with one or more longitudinally extending passages (ducts) 17. The passages 17 provide for the ducting of water and electricity to locations along the wall member 10 and the next adjacent wall member. For example the upper passage 17 may communicate with a vertically extending passage provided with a water sprinkler outlet 18. In an alternative construction a vertical passage 19 may extend to the upper passage 17. The passage (duct) 19 being adapted to receive a light fitting 20. The passage 19 communicates with the passage 17 for the purposes of electrically cabling. The passages 19 extend between the end faces 13.

If so required the passages 17 and 19 may be formed by plastic conduit.

If so required the wall member 20 may include reinforcing 21 in the form of mesh or reinforcing rod.

In the embodiment of Figures 4 and 5 the wall portion 12 is formed of synthetic or natural rock.

In the embodiment of Figure 6 the wall member 10 is curved.

In constructing a wall from a plurality of wall members 10, the end faces 13 abut so that the passages 17 of adjacent wall members 10 are aligned.

In the embodiment of Figure 5 the base 11 is formed of segments 21 that are angularly offset so that the wall member 10 maybe used to form corners.

In the embodiment of Figure 7 the longitudinally extending recess 15 in the base 11 has been enlarged to aid in reducing the weight of the wall member 10.

In the embodiment of Figure 8 the wall member 10 is adapted to rest on a footing

portion 24. In this embodiment, the engaging portion 24 is of an arcuate configuration and matches the arcuate configuration of the longitudinally extending recess 15 within which the engaging portion 14 securely locates. Also, in this embodiment there is embedded in the wall member 20 an insert 25 of lightweight material to aid in reducing the weight of the wall member 10. For example, the insert 25 may be formed of expanded polystyrene.

In the embodiments of Figures 1 to 6, the base 11 and wall portion 12 are integrally formed from cast concrete. In the embodiment of Figure 8, although the base 11 and wall portion 12 are both formed from cast concrete, they are separately formed and are assembled on site.

In the embodiment of Figure 9, the base 11 is formed of cast concrete as previously discussed however the wall portion 12 is hollow in that it is formed by a sheet member 26. For example, the sheet member 26 may be formed of aluminium or other suitable metal or plastics material. The sheet member 26 has its extremities 27 preferably attached to the base 11 by being embedded therein while the base 11 is still "curing". Accordingly, the wall portion 12 of this embodiment has a longitudinal hollow 28 through which ducts 17 and 19 pass.

The above mentioned preferred embodiment has a number of advantages including easy installation and replacement of any wall members that may be damaged. The wall members 10 are easily transported and are reasonably simple and easy to erect. A further advantage is that a wall constructed of a plurality of the members 10 can provide for lawn and garden edging.